

Tennessee Immunization Certificate Validation Tool-Health Department

Last Updated: April 10, 2013

# What is the TN Immunization Certificate Validation Tool (ICVT)?

- ▶ **New** function on TWIS
- It can produce either:
  - Validated Official TN Immunization Certificate
    - ▶ Complete for purposes of child care or school entry
    - ▶ No signature required for immunization section
    - Also produces successful validation report

      Or
  - ▶ Failed Validation Report
    - ▶ Highlights where record falls short of requirements

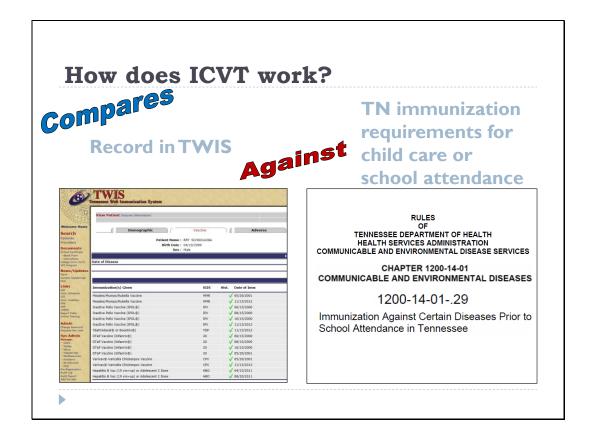


The validation tool is a module on TWIS that launched Monday, April 15.

It's able to produce two different items.

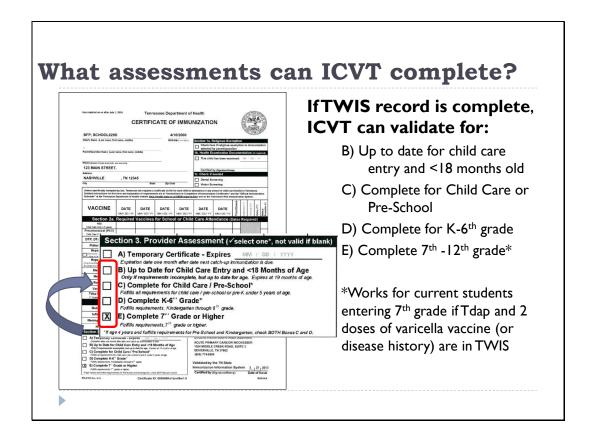
One of the items is a validated Official TN Immunization Certificate. Since the validation tool validates the certificate, no healthcare provider signature is required.

The other item that the tool produces is a validation report. The validation report can be one of two types: the successful or the passed report and the failed report.



So, how does the validation tool work?

The tool is programmed with many, many rules and it uses these rules when comparing a child's record in TWIS to the TN regulations for child care or school attendance.

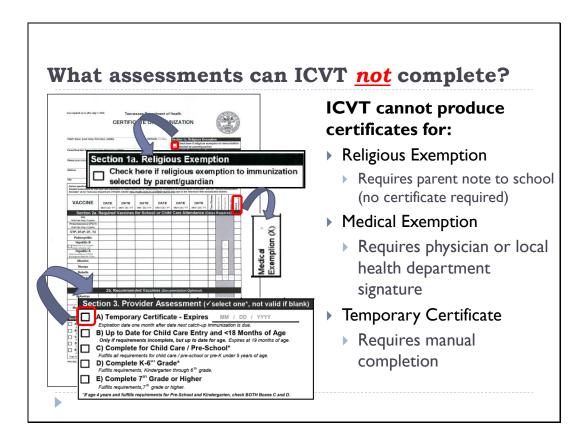


So, since the tool uses a child's record in TWIS, the record must be complete for requirements in order for the tool to validate a certificate.

This slide lists the assessments that the tool is able to do. Notice that Boxes B through E in Section 3, the Provider Assessment section of the certificate are covered. The range is from up to date for childcare entry to complete for 7<sup>th</sup> grade and higher.

The tool will validate certificates for current TN students entering 7<sup>th</sup> grade even if only one dose of Tdap and 2 doses of varicella vaccine or disease history of varicella are documented in TWIS. For varicella vaccine, there have to be 2 doses documented in TWIS.

If the TWIS record is incomplete for requirements, the tool can't validate a certificate!



The validation tool can't produce certificates for religious exemption or medical exemption and it can't produce temporary certificates.

In the case of religious exemption, no certificate is required.

Certificates with medical exemption and temporary certificates have to be completed manually and require a signature by an authorized healthcare provider.

# How does ICVT know which certificate a child needs?

- It DOES NOT know! User must select correct validation type
- User must know:
  - ▶ Is this child entering child care/pre-school, Kindergarten or a current student in TN schools entering 7<sup>th</sup> grade student, **or**
  - Is child a brand new student starting TN school in first through twelfth grade (different rules/assessment apply for these!)



The tool is smart, but it doesn't know which certificate a child needs.

So as a first step, the user must select the correct validation type.

There are 2 validation types.

The first validation type is for:

A child who is entering child care/pre-school, or Kindergarten or a current student in TN schools who is entering 7<sup>th</sup> grade.

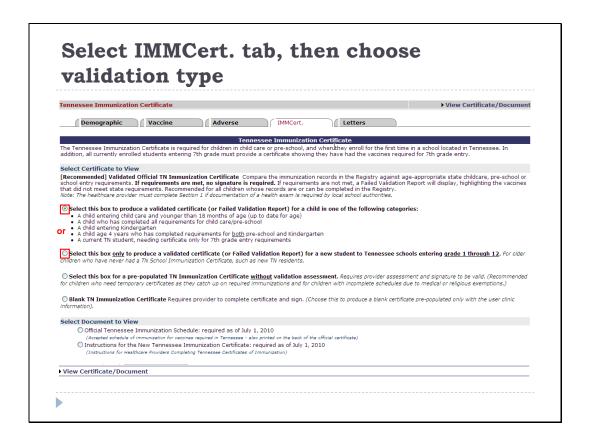
The second validation type is for:

A child who is a new student to TN schools entering 1<sup>st</sup> through 12<sup>th</sup> grade.

Notice that I said that the second validation type is for students who are **new** to TN schools. This validation type is not meant to be used for students in 1<sup>st</sup> through 12<sup>th</sup> grade who are **current** students in TN schools. These current students should already have certificates on file

that were created whenever they entered school, either in Kindergarten or later. Current students had to meet requirements that were in place when they enrolled in school. The immunization requirements that the tool uses for new students to these grades aren't applicable to students who are currently enrolled in TN schools. There is no validation type for current students in grades 1-6 and 8-12.

The only time that a current student needs another certificate is when he is preparing to enter 7<sup>th</sup> grade. Remember the first validation type is for these students.



This is the IMMCert, screen in TWIS.

Notice the two red boxes surrounding the radio buttons in the middle of the screen. This is the place where the user chooses the validation type. Depending on the age of the child, one or both of these options will be displayed. For younger children, only the first option will display and for older children, both options will display.

Notice that the pre-populated certificate is the third option and the blank certificate is the fourth. Certificates produced by using these options are still acceptable as long as the certificates are completed correctly.

# Once ICVT is done, more than one result may show, which one do I pick?

- ► ICVT assesses child's record against all requirements that MIGHT apply to a child of this age
  - ▶ It will display Pass/Fail results for every Provider Assessment category child *might* qualify for user chooses
- User must select correct type of "Provider Assessment" category
  - Don't be tempted to select a passing option just because it's there...be sure that's the assessment child needs
  - Example: a 4 ½ year old is starting Kindergarten (K) and TWIS record has all vaccines except his second hepatitis A vaccine
    - ▶ ICVT cannot tell if child is enrolling in pre-school or K
    - ▶ Valid for Pre-school, Fails for K (until HAV series completed)

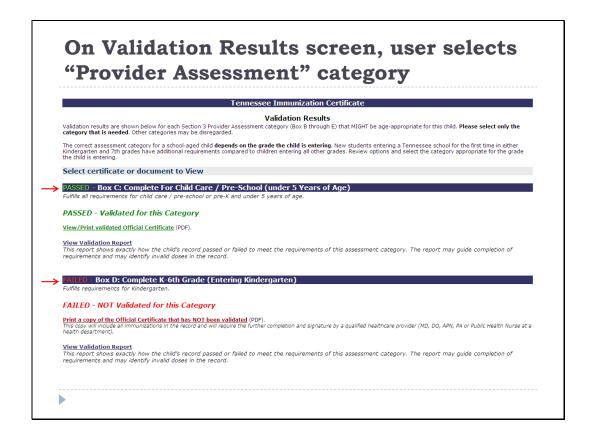


The tool evaluates the child's record to see if it meets the childcare and/or school requirements that **might** apply to a child of this age.

Multiple "Provider Assessment" categories may display with a Pass/Fail result for each category.

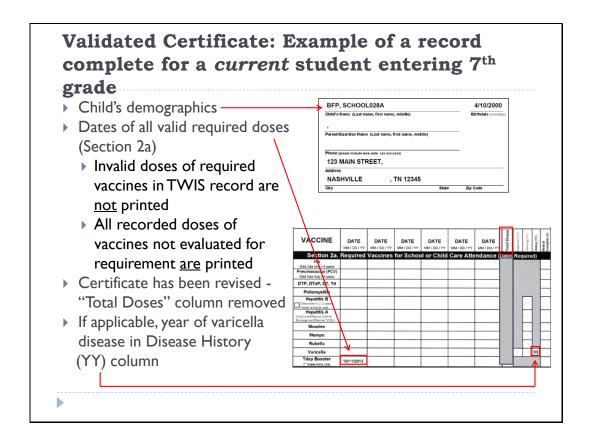
The user must select the correct type of "Provider Assessment" category. The user shouldn't just select a category that passes, but should select the category that the child needs.

On the next slide, I'll show you the validation results for a 4 1/2 year old enrolling in Kindergarten whose TWIS record doesn't include a second dose of Hepatitis A. The tool doesn't know if the child is enrolling in pre-school or Kindergarten so it evaluates for both. The validation passes for pre-school and fails for Kindergarten.



Here is the validation results screen in TWIS. Notice that the first Provider Assessment category listed is Box C: Complete for Child Care/Pre-school and this category has passed. The second Provider Assessment category listed is Box D: Complete K-6<sup>th</sup> Grade (Entering Kindergarten) and this category failed.

Since this child needs a certificate for Kindergarten, the user should concentrate on the second category and ignore the first.



Now let's look at an example of a validated certificate. This certificate is for a child who is a current student in TN schools who is preparing to enter 7<sup>th</sup> grade. His TWIS record only has 1 dose of Tdap and documentation of history of varicella disease. So, the tool has determined that the requirements for a current student entering 7<sup>th</sup> grade are met and it has produced a validated certificate.

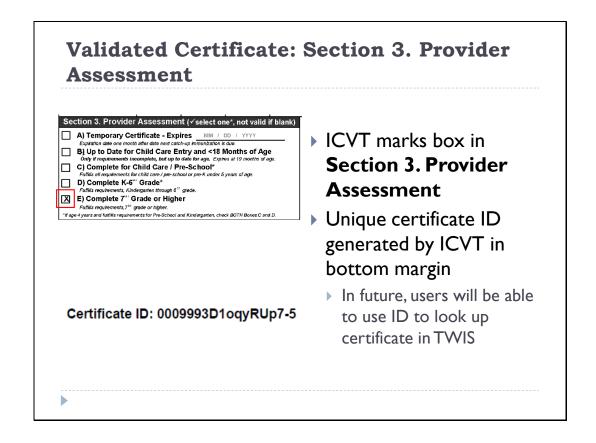
Starting at the top, the demographic section is populated with identifying information for the child.

The required vaccine section (2a.) displays dates of **valid required** doses. If this child's record contained required vaccine doses that were evaluated as invalid, these invalid doses would not be displayed. If this child's record contained other vaccine doses that were not evaluated for requirements, **all** doses would be displayed. This includes vaccines listed in the recommended vaccines section (2b.).

The certificate has been revised to remove the "Total Doses" column. The validated certificate doesn't have a total doses column.

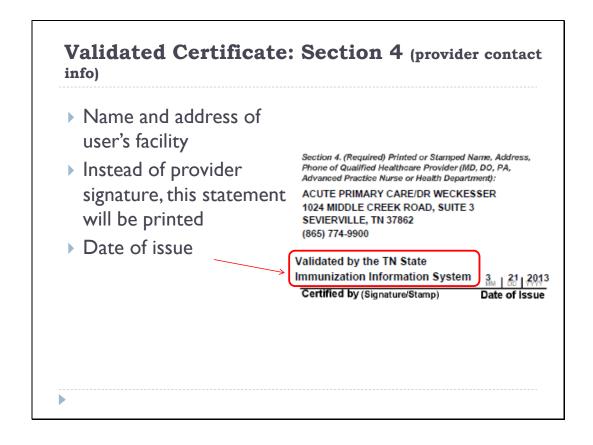
Note: Previous printed versions of the certificate with the total doses column can still be used and this column can be left blank.

As you see on this child's certificate, if the child's record includes history of varicella disease and this history is used to meet varicella requirements, the history will display on the certificate.



The validation tool marks the appropriate box in Section 3. Provider Assessment.

The tool will also generate a unique certificate ID that is placed in the bottom margin. At some future date, users may be able to look up a validated certificate in TWIS by using this ID.



In section 4 of the certificate, the name and address of the user's facility displays.

And instead of the provider signature, the certificate displays the phrase, "Validated by the TN State Immunization Information System."

The date of issue is also displayed.

### Who can print a Validated Certificate?

- ▶ **Any TWIS** user, including school officials or school nurses with read-only access to TWIS and pharmacists
- It may be provided to parent with no further signature to confirm immunizations
- ▶ **Note:** Section 1b. Health Examination Documentation
  - Cannot be completed automatically with ICVT
  - ▶ Health examination policies are made by local school districts and not part of Department of Health rules



Any TWIS user can print a validated certificate. This includes users with read-only access such as school officials and school nurses. Pharmacists have read and write access to TWIS and they can also print validated certificates.

Again no additional signature is required on the validated certificate!

One thing to keep in mind is that Section 1b. Health Examination Documentation can't be completed by the tool. TWIS doesn't store data related to health examinations. You can produce a validated certificate for a child who needs a health examination and then the parent can take the certificate to the child's healthcare provider for completion of the health examination section. Just a note: The local school districts make the policies for health examination and the Department of Health is not involved in health examination requirements.

# Failed Validation Report: Record does not meet requirements

- ▶ Choose this report to see which vaccines met or did not meet requirements
- If requirements not met, why?
  - Missing doses
  - Invalid dose (it will indicate type of error below)
    - □ Invalid because it was given before minimum age
    - □ Invalid because dose in series given too close to previous dose
  - Schedule and minimum intervals/ages follow CDC's current published Recommended Childhood Immunization Schedule and Catch-Up Schedule
  - Validation reports only show required vaccines and do NOT assess vaccines or doses not required for "Provider Assessment" category

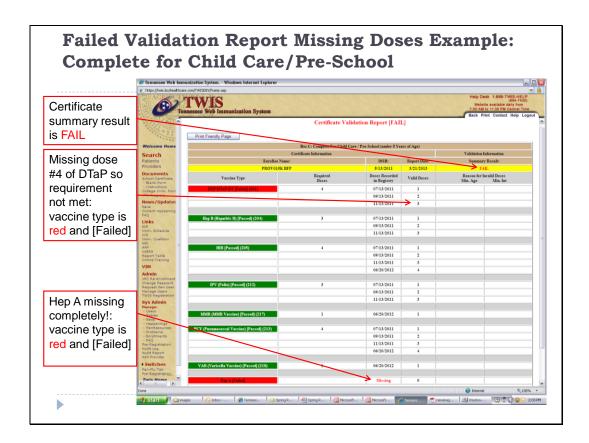
Now on to the second type of item that the tool produces, the validation report. Remember that I mentioned earlier that the tool produces two types of validation reports, pass and fail. We're going to spend the next few minutes on the failed validation report.

This report lists the vaccines that were included in the evaluation and shows which vaccines met and didn't meet requirements.

If requirements weren't met, it shows why they weren't met. Missing doses might be one of the reasons and invalid doses could be another. Invalid doses are invalid because they were given before the minimum age **and/or** because the dose was given too close to a previous dose in the series.

The tool uses CDC's 2013 Recommended Childhood Immunization and Catch-Up Schedules to evaluate a child's record. These schedules include information about minimum ages and intervals.

It's important to remember that validation reports only show required vaccines and don't evaluate **vaccines or vaccine doses** that are not required for a particular assessment category. Next, I'll show you some examples of failed validation reports.



This is an example of a failed validation report for a child needing a complete for child care/preschool certificate.

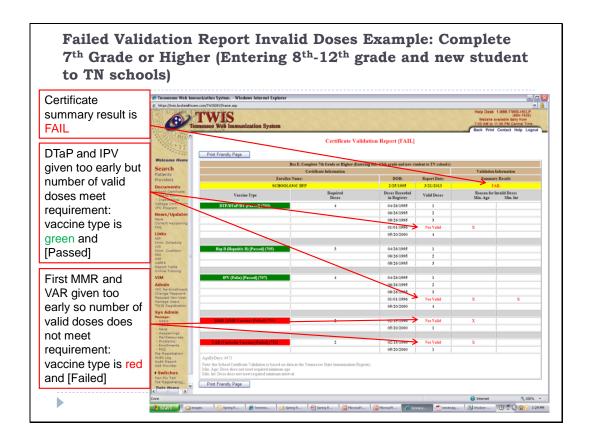
First notice that there are 8 vaccines listed on the report. These are the vaccines that are required for this "Provider Assessment" category, Complete for Child Care/Pre-School. Rotavirus is not listed because it's not required for child care/pre-school attendance. Remember, validation reports only show required vaccines and don't evaluate **vaccines or vaccine doses** that are not required for a particular assessment category.

The vaccine listed at the top of the report is DTaP and this child's record has only 3 doses. But 4 doses are required for this assessment category, so the DTaP requirement isn't met and DTaP is in red and failed displays in the red bar. This is one example of a missing dose.

Another is the vaccine listed at the bottom of the report. This vaccine is Hepatitis A and the child's record doesn't have any doses of Hepatitis A so missing is displayed. Since Hepatitis A is a

required vaccine for this assessment category, Hepatitis A is in red and failed displays in the red bar.

Since the child's record didn't meet requirements, the certificate summary result at the top right is fail and is in red.



This is another example of a failed validation report. This one is for a new student to TN schools who is entering 12<sup>th</sup> grade.

Notice that there are 5 vaccines listed on the report. These are the vaccines that are required for this "Provider Assessment" category, Complete 7<sup>th</sup> Grade or Higher (Entering 8<sup>th</sup>-12<sup>th</sup> grade and new student to TN schools). HPV is not listed because it's not required for 7<sup>th</sup> grade or higher school attendance. Again, validation reports only show required vaccines and don't evaluate **vaccines or vaccine doses** that are not required for a particular assessment category.

Notice that both DTaP and IPV show doses that are not valid. The DTaP dose is not valid because of minimum age and the IPV dose is not valid because of minimum age and minimum interval. But in the case of these vaccines, the total number of valid doses meet the requirement for this assessment category and so both vaccine types are green and passed displays in the green bars.

Now look at MMR and Varicella. The first dose of both of these vaccines was given before the minimum age and because these doses are invalid, the total number of valid doses doesn't

meet the requirement for this assessment category. Both of these vaccine types are red and failed displays in the red bars.

Since the child's record didn't meet requirements, the certificate summary result at the top right is fail and is in red.

	Tennessee Department of Health Immunization Registry Official Immunization Certificate Automated Validation Assessme [FAIL]						
V : (	Box E: Complete 7th Grade or Hig	her (Enteri	ng 8th -12th grad	e and new stu	ident to TN sc	hools)	
Vaccine type passed	Certificate I	Certificate Information				Validation Information	
validation: vaccine type	Enrollee Name:	Enrollee Name:		Report Date:	Summa	ry Result:	
	SCHOOL030C BFP		2/25/1995	4/3/2013		AIL	
gray and [Passed]	Vaccine Type	Required Doses	Doses Recorded in Registry	Valid Doses	Reason for Min. Age	Invalid Dose Min.	
	DTP/DTaP/DT [Passed] (702)	4	04/26/1995	1			
			06/26/1995	2			
			08/26/1995	3			
			01/01/1996	Not Valid	X		
			05/20/2000	4			
	Hep B (Hepatitis B) [Passed] (705)	3	04/26/1995	1			
			06/26/1995	2			
		<u> </u>	08/26/1995	3			
		<u> </u>				-	
Vaccine type failed	IPV (Polio) [Passed] (707)	4	04/26/1995	1		-	
		-	06/26/1995	3		-	
validation: vaccine type		-	01/01/1996	Not Valid	X	X	
bold and [Failed]		-	05/20/2000	Not Valid	_ A		
bold and [i alied]			03/20/2000	-		+	
	MMR (MMR Vaccine) [Failed] (709)	2	02/15/1996	Not Valid	X	<del>†                                    </del>	
	(		05/20/2000	1	<u> </u>	<u> </u>	
		i			İ	i –	
	VAR (Varicella Vaccine) [Failed] (710)	2	02/15/1996	Not Valid	X	İ	
			05/20/2000	1			
	Agethy Days: 6473  Note: This preachool or school automated va Tennessee Immunization Registry. The accur records entered by immunization providers.  Min. Age: Dose does not meet required mini Min. Int: This dose was given before the min	acy of the in num age.	formation depend	s upon the con	mpleteness and	accuracy of	

Users have the ability to print validation reports. This is a printout of the failed validation report from the previous slide. Notice that on the printout, the vaccine types that pass are gray and passed is printed. The vaccine types that fail are bold and failed is printed.

### Failed Validation Report - Printout

- ▶ Title at top shows category of Provider Assessment in Section 3 of certificate
  - ▶ Box E for this new 12<sup>th</sup> grader who just moved to TN
- ▶ Child's name, date of birth
- Date report was generated
- Summary result (FAIL)

Box E: Complete 7th Grade or Higher (Entering 8th -12th grade and new student to TN schools)								
Certificate Information	Validation Information							
Enrollee Name:	DOB:	Report Date:	Summary Result:					
SCHOOL030C BFP	2/25/1995	3/21/2013	FAIL					



Now let's look more closely at the parts of the failed validation report.

You'll see the Provider Assessment category at the top. This one is Box E: Complete  $7^{th}$  Grade or Higher (Entering  $8^{th} - 12^{th}$  grade and new student to TN schools).

Identifying info for the child, the report date, and the certificate summary result are listed next.

### Failed Validation Report - Printout

- ▶ Each required vaccine (vaccines not required are <u>not</u> assessed)
- ▶ Required number of doses (based on child's age and assessment need, such as whether for child care or school)
- Dates of every dose recorded in TWIS (whether valid or not)
- ▶ Each date either a valid dose #, or "Not Valid"
- Not Valid doses: minimum age and/or minimum interval error
- Use of combination vaccines will result is an "extra" dose of one or more antigens, and those "extra" doses will flag as invalid. This is not a problem as long as overall series passes.

Vaccine Type	Required Doses	Doses Recorded in Registry	Valid Doses	Reason for I Min. Age	nvalid Doses Min. Int
IPV (Polio) [Passed] (707)	4	04/26/1995	1		
		06/26/1995	2		
		08/26/1995	3		
		01/01/1996	Not Valid	X	X
		05/20/2000	4		

This is the vaccine section of the report.

In the Vaccine Type column, again, only required vaccine types for a particular provider assessment category are included on the report.

The Required Doses column contains the required number of doses for a particular assessment category.

The Doses Recorded in Registry column contains the dates for doses of required vaccines that are in TWIS.

The Valid Doses column usually contains either a dose number or not valid for each dose recorded in TWIS.

There may be some times that the valid doses column is blank. A good example of this would be a child who is 2 years old and who has had 2 doses of Hepatitis A vaccine. The Hepatitis A

requirement for childcare attendance is 1 dose of vaccine so the tool evaluates the first dose of vaccine and if it is valid, the tool ignores the second dose. The validation report for this child would display the first dose as 1, but the valid doses column would be blank for the second dose.

Let's look at the Reason for Invalid Doses columns...If any of the evaluated doses are not valid, the Reason for Invalid Doses columns will be marked with an X to indicate the reason or reasons the dose is invalid. The reason could be minimum age **and/or** minimum interval.

In this example, a combination vaccine was used, which resulted in an extra dose of IPV, a 4<sup>th</sup> dose given before the minimum age and interval. But this is OK because another dose was given later that is valid, so the record meets the required number of doses of IPV for this assessment category and the IPV series passed.

### Options for use of Failed Validation Report

- ▶ Users who have read-only access and cannot alter TWIS records (such as school personnel) or pharmacists who have no option to print a certificate that is not validated:
  - Print and give failed validation report to parent to show what child needs
  - May share with healthcare provider to show what is needed
- ▶ Local Health Departments:
  - If failed report shows missing doses, may enter missing records:
    - ▶ History doses from medical records into TWIS or PTBMIS
    - ▶ Doses given at visit into PTBMIS
  - After updating record, may re-run ICVT for validated certificate



Now that you know all about the failed validation report, how will it be used? Specifically, how will you use it?

You need to be aware that school personnel and pharmacists may be printing these reports and giving them to parents so you may see some parents showing up with them in health department clinics. When parents give you the report, you'll want to re-run the tool to make sure that you have the most accurate information.

Whenever you run the tool and get a failed validation report for the desired assessment category, you'll need to update the record. Health departments can do this by entering history doses into TWIS or PTBMIS or by entering doses given that visit into PTBMIS. After updating the record, you'll want to re-run the tool to produce a validated certificate.

## What if Needed Vaccines *Cannot* be Completed at Visit? Temporary Certificate or Medical Exemption

- Healthcare providers qualified to sign immunization certificates, (MD, DO, PA, APN or LHD) manually complete and sign a temporary certificate
- Medical exemption requires MD, DO or LHD signature
- ▶ To produce form for completion of either temporary or medical exemption, providers can:
  - ▶ Print a copy of the Official Immunization Certificate that has not been validated. This is identical to a prepopulated TN Immunization Certificate without validation assessment.
  - ▶ Or print a blank TN Immunization Certificate...

If needed vaccines can't be completed at that visit, then either a temporary certificate or, if appropriate, a certificate with medical exemption can be issued. Both of these certificates must be manually completed and both should be signed by the appropriate authorized healthcare provider.

The new Validation Results screen has a certificate that you can use as the basis for a temporary certificate or a certificate with medical exemption. It's called the **Official Immunization Certificate that has not been validated**. This certificate is identical to the prepopulated certificate on the IMMCert screen.

You can also use either a pre-populated or a blank certificate. These certificates are still located on the IMMCert screen.

# Access to ICVT: All TWIS Users To become a TWIS user, LHD staff contact System Administrator at regional office

How do you get access to this GREAT! WONDERFUL! FABULOUS! tool.

You have to have access to TWIS!

Health department staff who don't already have access to TWIS need to contact their System Administer to be added as a TWIS user.

### **Information and Assistance**

### Questions about ICVT?

- ▶ Resources on TWIS for each category of user:
  - Medical offices and local health departments (full access users)
  - Pharmacists (full registry use, but print only ICVT-validated certificates)
  - School officials/nurses (read-only access, print ICVT-validated certificates)
- ▶ Flyers, user's guides, slide sets, Webinars

### Problems using ICVT?

TWIS Help Desk (888)894-7435 or

health.imm@tn.gov



Resources are available on TWIS and are specific for each type of user. The resources include flyers, user's guides, and slide sets. Resources are available on this webpage <a href="http://health.state.tn.us/TWIS/requirements.htm">http://health.state.tn.us/TWIS/requirements.htm</a>.

Please contact the contact the TWIS Help Desk if you have problems using the validation tool.